

AMENDMENTS TO THE SPECIFICATIONS

Please amend paragraph [0018] as indicated below:

[0018] Figures 2A and 2B depict measurement tubular 401 and measurement sonde 419 which is adapted to be positioned within the central bore 410 of measurement tubular 401. Measurement tubular 401 is composed substantially of steel, as are other prior art drill collars; however, measurement tubular 401 includes four regions which include a plurality of axial slots which are disposed circumferentially about measurement tubular 401 and which extend through the width of measurement tubular 401, but which are filled with a poorly-conducting or nonconducting material, such as a KEVLAR material or such as an epoxy or ceramic material. The axial slots which are filled with nonconducting or poorly conducting material allow for the inward and outward passage of electric and/or magnetic oscillating fields, but which prevent the passage of fluid through measurement tubular 401. ~~As is shown in Figure 2A-1~~ As is shown in Figure 2A, upper transmitter region 402 includes the axial slots which allow for the inward and outward passage of electric and/or magnetic oscillating fields. Likewise, lower transmitter region 407 includes the axial slots which allow for the inward or outward passage of electric and/or magnetic oscillating fields. Receiver regions 403, 405 are provided in a position intermediate the transmitter regions 402, 407. Receiver regions 403, 405 also include the axial slots filled with poorly conducting or non-conducting material, which allow for the inward or outward passage of electric and/or magnetic oscillating fields. The regions which contain the axial slots filled with poorly-conducting

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or non-conducting material are separated and surrounded by solid regions 409, 411, 413, 415, and 417, which do not allow for the passage of electrical and/or oscillating fields, since they are composed of steel which dissipates the electrical and/or magnetic oscillating field by the formation of eddy currents. Measurement sonde 419 in the depiction of Figure 2B is disposed adjacent measurement tubular 401 in the depiction of Figure 2B. In actual use, measurement sonde 419 is disposed within the central bore of measurement tubular 401. Measurement sonde 419 is composed of upper transmitter assembly and pressure housing 421 which contains the upper transmitting antenna, receiver assembly and middle pressure housing 425 which contain the receiving antennas, and lower transmitter assembly and pressure housing 429 which contain the lower transmitter. Upper paddle assembly 423 and lower paddle assembly 427 are provided to centralize and position measurement sonde 413 within the central bore of measurement tubular 401. The electrical, electronic, and data processing components which cooperate to allow for the reception and transmission modes of operation are contained within the pressure housings 421, 425, and 427. Upper transmitter 431 is disposed on the exterior surface of upper transmitter assembly and pressure housing 421 and is adapted to be aligned with transmitter region 402 when measurement sonde 419 is positioned within the central bore of measurement tubular 401. Lower transmitter 437 is carried about the exterior portion of lower transmitter assembly and pressure housing 429 and is adapted in position to be aligned with transmitter region 407 of measurement tubular 401 when measurement sonde 419 is positioned within the central bore of measurement tubular 401. Receiver antennae 433, 435 are carried by receiver assembly and middle pressure

housing 425 and adapted in position to align with receiver regions 403, 405 when measurement sonde 419 is positioned within the central bore of measurement tubular 401. The axial slots in measurement tubular 401 which are filled with poorly conducting or non-conducting material allow for the sonde-based measurement of well parameters outside the drillstring which would normally be impeded by the presence of a steel collar. The slots are constructed such that the collar of measurement tubular 401 maintains its structural integrity necessary for drilling operations, and drilling fluids are not allowed to flow through the axial slots since the non-conducting or poorly conducting materials are solid fluid-impermeable materials.

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